

Hershey

November 21, 1946.

Dear

I am sending the following, as requested:

SM-13. *S. typhimurium*, monophasic II, an isoleucine-valineless mutant.
Lysogenic for

SY-36 *S. gallinarum*. (= *sanguinarum*). Can be grown with thiamin or
B₁ thiazole supplement.

Lysogenicity is conveniently tested for either with simple filtrates of SM-13 grown alone, or better, with SY-36 in broth. For large scale tests for this property, SY-36 can be plated on synthetic agar with B₁, and single colonies of SM-13 picked to the pre-spread plates. Due to the nutritional deficiency, the SM-13 does not grow, but if it carries phage, the lysis of the indicator is apparent. Several hundred colonies of SM-13 from washed suspensions, and following various treatments, e.g. heavy UV treatment, cultivation in Phosphine GRN, or in arsenite, have all been lysogenic. It should be possible to set up tests where several hundred colonies of SM-13 can be allowed to form on a plate, and use the ring of lysis around the colony for large scale testing.

Sincerely,

Joshua Lederberg

CC: Luria
Hershey